

List of Figures in Phase-1 Study:

Fig -1. Mean Random blood glucose (RBG) values of different study groups

Fig-2. Mean glycated haemoglobin (HbA1c) levels in control and test groups.

Fig- 3: Insulin levels in various groups after 16 weeks of treatment

Fig-4: Mean serum urea values in rats of different study groups

Fig-5. Mean serum creatinine levels in rats of different study groups

Figure-6: Microalbuminuria levels in various study groups

Fig-7. Mean serum Aspartate transaminase levels in rats of different study groups

Fig- 8: Alanine transaminase (ALT) levels of different groups after 16 weeks of treatment

Fig- 9: Gamma glutamyl transferase (GGT) levels of different groups after 16 weeks of treatment

Fig- 10: Total cholesterol levels of different groups after 16 weeks of treatment

Fig- 11: Triglyceride levels of different groups after 16 weeks of treatment

Fig- 12: HDL levels of different groups after 16 weeks of treatment

Fig- 13: AR activity in various groups after 16 weeks of treatment

Fig- 14: GSH levels in various groups after 16 weeks of treatment

Fig- 15: Glycogen levels in various groups after 16 weeks of treatment

Fig- 16: Serum Interleukin-6 levels in various groups after 16 weeks of treatment

Fig- 17: Serum Interleukin-10 levels in various groups after 16 weeks of treatment

Fig- 18: Kidney Interleukin-6 levels in various groups after 16 weeks of treatment

Fig- 19: Kidney Interleukin-10 levels in various groups after 16 weeks of treatment

Figure- 20A, 20B, 20C: Histology of pancreas of NC, DC and DM+Glib groups using hematoxylin and eosin stains

Figure- 21A, 21B, 21C, 21D: *T.terrestris* effect on morphology of pancreas

Figure-22A, 22B, 22C, 22D: *P.marsupium* effect on morphology of pancreas

Figure 23A, 23B, 23C: Histology of liver of NC, DC and DM+Glib groups using hematoxylin and eosin stains

Figure-24A, 24B, 24C, 24D: *T.terrestris* effect on morphology of liver

Figure-25A, 25B, 25C, 25D: *P.marsupium* effect on morphology of liver

Figure 26A, 26B, 26C: Histology of kidney of NC, DC and DM+Glib groups using hematoxylin and eosin stains

Figure-27A, 27B, 27C, 27D: *T.terrestris* effect on morphology of kidney

Figure-28A, 28B, 28C, 28D: *P.marsupium* effect on morphology of kidney

Fig-29A- 29G: Escape latencies in various groups and time spent in different quadrants by animals in different groups

Figure-30: DPPH free radical scavenging activity of plant extracts

List of Figures in Phase-2 Study:

Fig -1. Body weight of different study groups

Fig -2. Mean Random blood glucose (RBG) values of different study groups

Fig-3. Mean HbA1c levels in various groups after 30 days treatment

Fig-4. Insulin levels in various groups 30 days after treatment

Figure-5. Serum urea values in different study groups after 30 days treatment

Fig-6. Serum creatinine levels in different study groups after 30 days treatment

Fig-7. Serum Aspartate transaminase levels in different study groups

Fig- 8: Serum Alanine transaminase (ALT) levels in various groups

Fig- 9: Gamma glutamyl transferase (GGT) levels in different groups after 30 days treatment

Fig- 10: Total cholesterol levels in various groups after 30 days treatment

Fig- 11: Triglyceride levels in various groups after 30 days treatment

Fig- 12: HDL levels in various groups after 30 days treatment

Fig- 13: AR activity in various groups 30 days after treatment

Fig- 14: GSH levels in various groups after 30 days treatment

Fig- 15: Glycogen levels in various groups

Fig- 16: Serum Interleukin-6 levels in various groups after 30 days of treatment

Fig- 17: Serum Interleukin-10 levels in various groups after 30 days of treatment

Fig- 18: Kidney Interleukin-6 levels in various groups after 30 days of treatment

Fig- 19: Kidney Interleukin-10 levels in various groups after 30 days of treatment

Figure-20A, 20B, 20C: Histology of pancreas of NC, DC and DM+Glib groups using hematoxylin and eosin stains

Figure-21A, 21B, 21C, 21D: Histopathology of pancreas of diabetic rats treated with only plant extract (DM+TT150 and DM+PM250) and diabetic rats treated with combination of Glib and *T.terrestris* and *P.marsupium* (DMGlib+TT150 and DMGlib+PM250)

Figure-22A, 22B, 22C: Histology of liver of NC, DC and DM+Glib groups using hematoxylin and eosin stains

Figure-23A, 23B, 23C, 23D: Histopathology of liver of diabetic rats treated with only plant extract (DM+TT150 and DM+PM250) and diabetic rats treated with combination of Glib and *T.terrestris* and *P.marsupium* (DMGlib+TT150 and DMGlib+PM250)

Figure-24A, 24B, 24C: Histology of kidney of NC, DC and DM+Glib groups using hematoxylin and eosin stains

Figure-25A, 25B, 25C, 25D: Histopathology of kidney of diabetic rats treated with only plant extract (DM+TT150 and DM+PM250) and diabetic rats treated with combination of Glib and *T.terrestris* and *P.marsupium* (DMGlib+TT150 and DMGlib+PM250)